the first message service and/or content of the message of the first message service. The length of a message of the first message service may be specified as a further element for establishing the message of the first message service. At least a portion of the elements may be accommodated in a user-data header of the SMS short message. In some embodiments the user-data header may be constructed in WCMP format, in which the message of the first message service is embedded. In some embodiments, an identifier for indicating the presence of a message of the first message service is included in the data portion the SMS short message.

BRIEF DESCRIPTION OF THE DRAWING

Exemplary embodiments of the present invention are shown in the drawing and are explained in detail in the following description. The figures show:

FIG. **1** illustrates the structure of an exemplary SMS short message of the first type A in GSM, in a first specific embodiment of the method according to the present invention;

FIG. **2** illustrates the structure of an exemplary short message of the first type A in GSM, in a second specific embodiment of the method according to the present invention;

FIG. **3** illustrates the structure of an exemplary SMS short message of the second type B in GSM, in a third specific embodiment of the method according to the present invention;

FIG. **4** illustrates the principal structure of an exemplary first type A of SMS in GSM; and

FIG. **5** illustrates the principal structure of an exemplary second type B of SMS short message in GSM.

DETAILED DESCRIPTION

In the figures, identical reference symbols denote identical or functionally equivalent elements. FIG. **1** shows the structure of an SMS short message of the first type A in GSM, in a first specific embodiment of the method according to the present invention. In the first specific embodiment according to FIG. **1**, the first message service is the MMS message service, the second message service is the SMS message service, and the dedicated, first group of messages of the MMS message service is: dedicated MMS user messages (e.g. short text messages); notification of the presence of a message on the MMS server (notification); logging on to an MMS session (session establishment); receipt for this log-on (receipt); explicit request for a notification from the MMS relay (explicit notification query); confirmation of the reception of sent MM's in the relay (ACK/NACK_submission_1); confirmation of the success in sending MM's to other users (ACK/NACK_submission_2); acknowledgment of the success/failure in delivering an MM (ACK/NACK_delivery); and triggering the automatic MM-download (pull-push).

In particular, FIG. **1** shows user-data header SM-DH of a type-A SMS short message for establishing a session with the MMS service. In header SM-H, the presence of a user-data header SM-DH is indicated by flag TP-UDHI=1 in accordance with the standards GSM 03.40 V7.1.0 (11/1998) Technical Realization of the Short Message Service (SMS); Point-to-Point (PP) und 3G 23.040 V3.2.0 (10/1999) Technical Realization of the Short Message Service (SMS); and Point-to-Point (PP).

The formatting of user-data header SM-DH also conforms to the standards. It begins with user-data header length UHL. This is followed by identification UHI of the first header element which, for example, is the MMS session establishment header (hex. 22) in this case. This is then followed by length UHEL of the first header element which, in this case, is therefore the necessary length for the MMS session establishment header information. Last come the MMS session establishment header data fields UHD, which are, in this case, the user ID and the user profile ID. Using the user ID, the user authenticates himself to his service provider, and using the profile ID, he selects the service/user profile desired for this MMS session. This may be succeeded by further user data header elements, e.g. for SMS concatenation, and specifically, beginning with identification UHI' of the second header element and so on, the further user data header elements being constructed in a manner analogous to the first header element.

For the case in which only the MMS session establishment header (hex. 22 in the example) is present, the above-mentioned standard stipulates that the necessary SMS header/SMS user data header fields be encoded as follows: SMS header: TP-UDHI=1 (user data header is present). SMS user data header: UDHL=user data header length UHL; IEI=UHI=22 (user data header identification=hex. 22 for MMS session establishment); IEIDL=length of this user data header element UHEL further information: user ID, profile ID; SMS data: empty, or additional SMS user data header or text message.

A unique user data header indicator UHI must be defined for each type of dedicated MMS message. A mapping table could appear as follows:

TABLE 1

Exemplary Assignment of Information Element Identifiers (IEI)

Type of Dedicated MMS Message	IEI-Code
MMS user message	20
MMS notification	21
MME session establishment	22
MMS receipt (of establishment)	23
MMS explicit notification-query	24
MMS ACK/NACK of submission (1)	25
MMS ACK/NACK of submission (2)	26
MMS ACK/NACK of delivery	27
MMS pull-push	28

FIG. **2** shows the structure of an SMS short message of the first type A in GSM, in a second specific embodiment of the method according to the present invention. The second specific embodiment according to FIG. **2** is similar to the first specific embodiment, but, in the example for the MMS session establishment, it includes a WCMP (wireless control message protocol) user data header having an embedded MMS protocol. Identification UHI of this user data header is done in the form of hexadecimal 09, in accordance with the standards GSM 03.40 V7.1.0 (11/1998) Technical Realization of the Short Message Service (SMS); Point-to-Point (PP) and 3G 23.040 V3.2.0 (10/1999) Technical Realization of the Short Message Service (SMS); and Point-to-Point (PP).

As shown in FIG. **2**, user data header SM-DH begins with user data header length UHL. This is then followed by identification UHI of the first header, which is now, in this case, hex. 09 for WCMP. This is then followed by the length of this user data header element UHEL, which is, in this case, the necessary length of the WCMP header (including